

Product Introduction

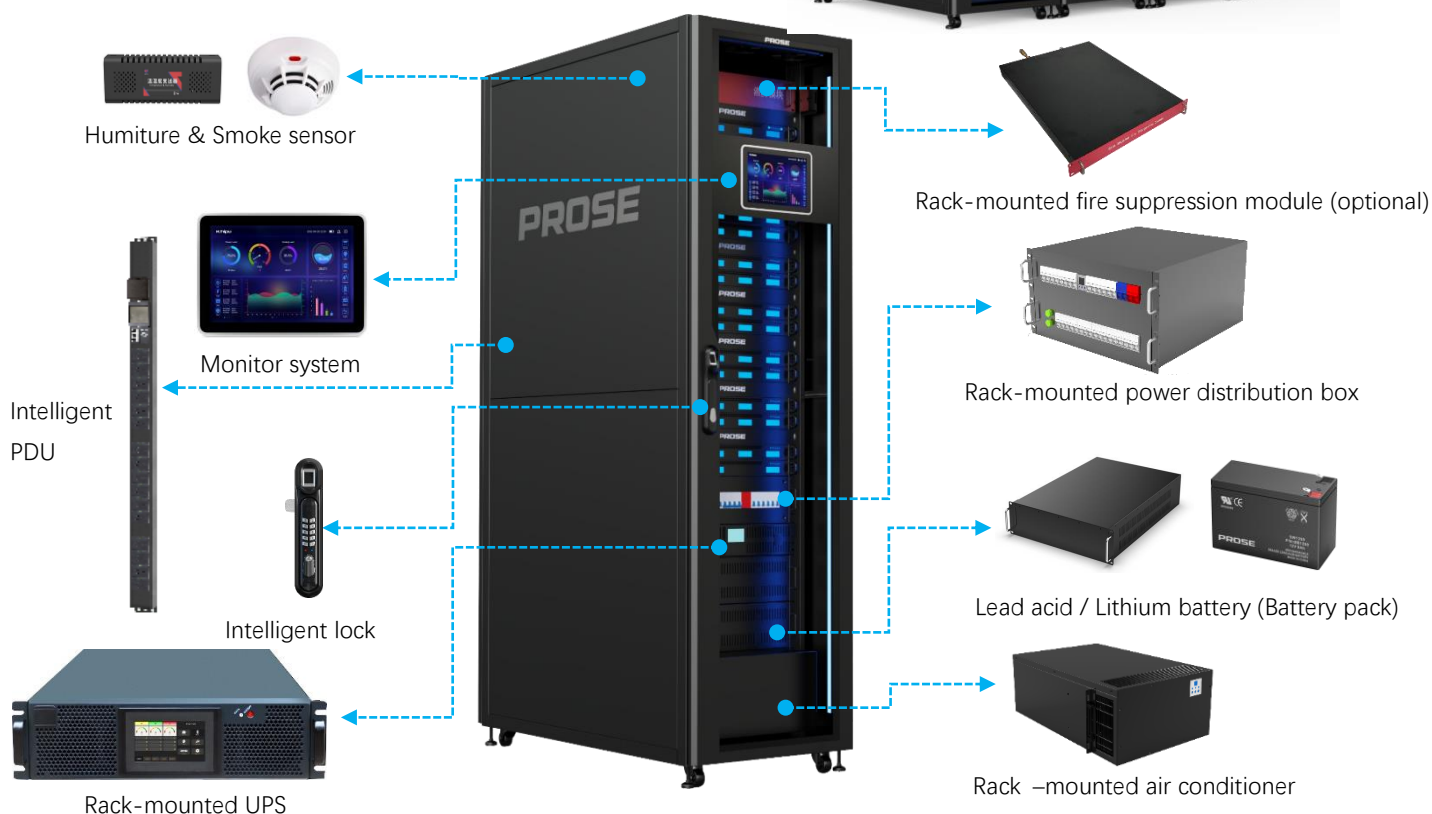
Traditional miniaturized data centers have problems such as high maintenance costs, long construction time, and inability to timely understand the operating status. Prose created and innovated smart micro-data center to meet the requirements.

To meet the future deployment requirements of edge computing applications, the KHIPU Smart Microdata Center adopts a modular development concept, The advantage of low cost, suitable for customers to install quickly and put into use in time.

The Smart Microdata Center contains cabinets, power distribution systems, refrigeration systems, cabling systems, while meeting the need for continuous power, to prevent data loss, MDC can be accessed through TCP/IP, Cloud App, etc., so that customers can know the running status of the product in real time. Temperature and humidity monitoring system and air-cooling system provide suitable working environment for customers' products. It also includes face recognition, fingerprint recognition and other authentication to provide data security protection.

Main Feature

- Lower Investment by 25%
- Fast Installation Only 2H
- FC AC Energy Saving 30%
- PUE Less Than 1.26
- System Emergency Response Protection
- Biometrics Authentication
- Cascading Available for Rack
- Saving Room Space 50%
- Quiet Operation Less-than 55dB
- DCIM 24H Cloud O&M



System specification

W600mm* D1200mm * H2050mm, 4 pcs of racks can be put in cascade configuration.

Item	Standard Cabinet
Height Unit (customizable)	42U
Cabinet Size (mm)	600 (W) x 1200(D) x 2050(H)
Weight	About 180kg
Static Load	Up to 2200kg
Color	Black or Gray
Structure Composition	Welding framework, cabinet seal design as a whole
Meet Standard	ANSI/EIA RS-310-D, IEC297-2, DIN41491, DIN41494, GB/T3047.2-92
IP Level	IP5X
Display Panel	10.1" Touch Panel LCD
Display Languages	English / Chinese
LED Lighting	BI-Color (Red & Blue)
Front Door	Toughened glass door with Mechanical lock or fingerprint lock (Support face detector)
Rear Door	Sheet metal door
Safety Standard	RoHS

Power Distribution Box



No.	Parameter	Value
1	Input Rated Voltage(V)	380VAC
2	Input Rated Current(A)	50A
3	Input Switch	50A /3P
4	Output Switch	2*32A/3P+C32A/4P+D20A/1P*2+16A/1P*6
5	Lightning Protection Level	Class C lightning protection
6	Dimensions(mm)	W*D*H, 483*500*7U
7	Color	Black, off-white or according to customer's specification
8	Ways To Enter and Exit	Top-in and top-out or according to customer's designation
9	Installation	19" Rack mounted
10	Cooling	Natural cooling

Precision Air Conditioning



Rack-Type Air Condition Technical Specification		
Type		6.5KW
Cooling Capacity	Cooling capacity	6.7
	Sensible heat ratio(SHR)	98%
Machine air volume (m³/h)		1500
Energy efficiency ratio (EER)		3.5
Compressor	Qty (PC)	2
	Type	Enclosed inverter compressor
Fans type		Hypokinesis EC centrifugal fan
Expansion valve type		Electronic expansion valve
Air supply mode		Upper, left, right and three side air supply
Evaporator		Copper pipe+ Hydrophilic fin
Freezing medium		R410A
Unit standard heating (W)		1000
Power parameter	Input	220V/50Hz
	Electric power supplying parameters FLA(A)	16.6(30)
	Recommended air switch model	32A
Pipe type	Self-draining pipe (mm)	Inner p16/Outer p21
	Strong-Draining pipe (mm)	Inner p5/Outer p7
	Refrigerant air pipe (mm)	15.88
	Refrigerant fluid pipe (mm)	9.52
Indoor machine size (mm)		440*760*352
Indoor machine weight (kg)		35
Outdoor machine size (mm)		810*580*280
Outdoor machine weight (kg)		35
Connect the inner and outer machines with copper pipes and cables		5m

UPS (Uninterrupted Power Supply)



Mode		UPS-RM20151-33
Power capacity		15kVA
Main input	Wire	3-phase +N wire + ground wire
	Voltage	380/400/415VAC (Line voltage)
	Frequency	50/60Hz
	Power factor	>0.99
	Current distortion rate	THDi<4% (100% linear load) THDi<3% (100% linear load)
	Voltage range	304~485VAC (line voltage) full load, 304~138VAC (line voltage), load from 100% to 40% linear derating
	Frequency range	40-70Hz
Battery	Battery voltage	±240VDC[32~44pcs option)
	Charging power	20%* Active Power (Max)
Bypass	Bypass voltage	380/400/415VAC (Line voltage)
	Frequency range	50/60Hz (rated power), can be set: 1Hz, ±3Hz, ±5Hz
Output	Rated output voltage	380/400/415VAC (Line voltage)
	Power factor	1
	Voltage accuracy	±1.0%
	Output dynamic response	<5% (20%-80%-20% step load)
	Dynamic recovery time	<30ms (0%-100%-0% step load)
	Output total harmonic distortion (THDu)	<1% (linear load), 5.5% (nonlinear load)
	Inverter overload	110%, 1 hour after the bypass; 125%, bypass in 10 minutes; 150%, 1 minute to bypass; 150%, transfer to bypass after 200ms
	Frequency accuracy	0.1%
	Peak value ratio	3: 1
	3-phase phase accuracy	120°±0.5°
System	Main mode efficiency	≥95%
	Cell mode efficiency	≥94.5%
	Reveal	LCD+LED
	Communication interface	RS232, RS485, Dry contact, battery cold start
	Operating temperature	0-40°C
	Storage temperature	-40°C~70°C
	Relative humidity	0-95% (no condensation)
	Noise (dB)	65dB@100%load, 62dB@45%load
	Option	SNMP network communication card and parallel components
Size(W*D*H) mm		485*790*130
Weight (kg)		25

Dynamic Environment Monitoring System



Item	Technical Specification
CPU	ARM Cortex A9 Quad-core, Max Frequency 1.2GHz
Operating System	Android 5.1
Memory	DDR3L 2GB
Flash Rom	8GB eMMC Flash
Standard Serial Port	2 Ports RS232
Standard Serial Port	2 Ports RS485
Debug Port	1 Port Micro USB
Digital Input Port	2 Ports DI
Digital Output Port	2 Ports DO(for relay control)
USB Port	3 Ports (1 Port USB Host, 2 Ports USB Device)
Debug Port	1 Port Micro USB
Output Supply	6 Ports 12V/1A
Wireless	Reserved for 3G, 4G and Wi-Fi module expansion slot
Ethernet	1 Ports RJ45 10M/100M/1000M
Operating Voltage	12V DC
Max Power	35W
Size	266 mm× 182 mm× 48.5 mm
ESD Level	Contact: 6KV; Air: 8KV
MTBF	≥100000H
Operating Temperature	-20~60℃
Operating Humidity	10%~90%RH

Battery Pack



Battery Pack



Valve Regulated Lead Acid Battery (VRLA)

Cabinet Power	Backup Time	Battery Pack Type	Battery Pack QTY
15KVA (13.5kw)	15 mins	5U Battery Pack (8pcs 24AH)	4set

PDU (Power Distribution Unit)



Item	Specification
Rated current	16A
Rated voltage	220VAC 50/60Hz
Output ports	24*C13
Max power	5KW
Outline size	1217(Adjustable length) x 44 x 44 mm
Installation method	Horizontal/Vertical installation
Safety certification	CCC
Function	Lightning protection, intelligent monitoring, and general circuit breaker are optional

Integrative Door Lock



Type of Device	Specification
Rated operating voltage	DC12V
Working current	Static standby: <250mA Dynamic Electronically Controlled Unlocking: <500mA
Communication mode	RS485, 9600bit/s
Service life	Above 500,000 times
Color	Black
Operating temperature/humidity	-20℃ ~50℃ / 20 ~ 90%
Storage temperature/humidity	-30℃ ~60℃ / 20 ~ 90%
IP rate	IP65
3 unlock modes	Remote unlocking by monitoring host control software Authorized card writes the card number and swipes card to unlock Mechanicals unlock
Access control authorization	500 to 5000 fingerprints
Authorized entrance number	Up to 5000
Software authorization	Authorized by system software through network Communication
Event records	Up to 1120 history records
Function	Mechanical unlocking, password of the IC card, fingerprint and so on, can be paired with
Communication interface	RS485 networking real-time monitoring, door status, handle status, real-time clock function

Server-Rack Automatic Fire Suppression System (Option)



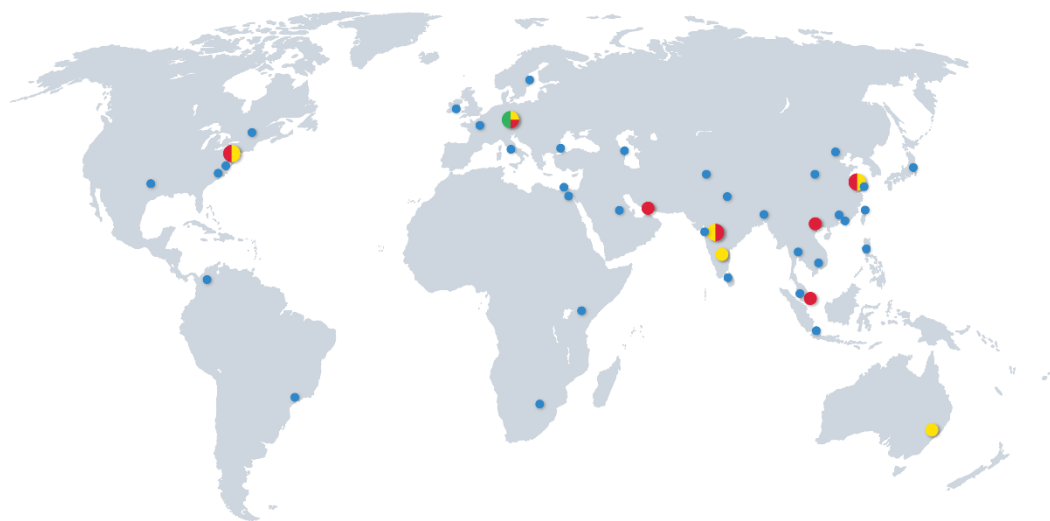
Type Of Device	Server-Rack FireSuppression Unit
Model number	JJQR-Q-W/C-4/1.2-WL/ZZ
Control the number of cabinets	Less than 4 set
Size	483(W)*500(D)*1U(H)mm
Fire extinguishing agent	HFC-ea.
Storage pressure(20℃)	1.2MPa
Injection time	≤10S
Action temperature of fire detecting tube	170 °C ±10 °C
Max. Length of Fire detection tube	5m for each cabinet

Product Configuration

PN	Description	Picture
MDC-5441-1122-C141-1451	Quadruple cabinet KHIPU MDC: 4 set Close Cabinet 42U: 600mm x 1200mm x 2050mm 1 set UPS capacity is 15KVA 3-phase 15-minute Battery Pack 1 set Panel Distribution Box 1 Phase 2 set Precision Air Cooling 6.5 KW 4 pcs Smoke sensor 4 pcs Temperature & Humidity Sensor 4 pcs PDU 24 outlet PDU, 16A, IEC 320 C13 4 pcs Keypad, Fingerprint lock 4 set Automatic fire suppression system 1 set Master Environmental Monitoring System bundling with Touch Panel LCD for Dashboard	

Note: The above product information is the default information and can be customized according to customers.

GLOBAL FOOTPRINT



Headquarters

Donauwörth - Germany
PROSE Technologies GmbH
Add.: Dr.-Friedrich-Drechsler-Straße 14, 86609
Donauwörth, Germany
E-mail: info.eu@prosetechnologies.com

Western Europe

Dublin - Ireland
PROSE Technologies (Ireland) Limited
Add.: 6th Floor, South Bank House, Barrow Street,
Dublin 4 Ireland
E-mail: Info@prosetechnologies.com

Eastern Europe & Central Asia

E-mail: info.eeca@prosetechnologies.com

North America

New Jersey - America
PROSE Technologies LLC
Add.: 550 Clark Drive Budd Lake, NJ 07828, United
States of America
Tel: +1 888 840 4066
E-mail: info.us@prosetechnologies.com

Middle East

Dubai - UAE
PROSE Technologies DMCC
Add.: 3702, Mazaya Business Avenue BB2, JLT, Dubai
Tel: +971 4 3999168
E-mail: info.ae@prosetechnologies.com

Africa

Nairobi - Kenya
PROSE Technologies Africa (PTY) Ltd
Tel: +254 780440410
E-mail: info.ke@prosetechnologies.com

Gauteng, (Johannesburg) - South Africa
PROSE Technologies Africa (PTY) Ltd
Add.: Building 20, Cambridge Office Park, 5 Bauhina
Road, Highveld Techno Park Centurion, Gauteng 0169,
South Africa
Mobile: +27 725554840
E-mail: info.za@prosetechnologies.com

South Asia

Mumbai - India
PROSE Technologies India Private Limited
Add.: 403-407, Eco Star, Vishveshwar Nagar,
Goregaon East, Mumbai, India 400063
Tel: +91 22-66453000
E-mail: info.in@prosetechnologies.com

Pune - India
PROSE Technologies India Pvt.Ltd
Add.: A-79, Block-A, Horizon Industrial Parks, Phase II,
MDC Chakan Industrial Area, Khed, Pune, India
410501
Tel: +91 2135-635200
E-mail: info.in@prosetechnologies.com

Bangalore - India
PROSE Technologies India Private Limited
Add.: No.494 East End Main Road, Jayanagar IX Block,
Bangalore, India 560069
E-mail: info.in@prosetechnologies.com

New Delhi - India
PROSE Technologies India Pvt.Ltd
Add.: H-3/157, 2nd Floor, Vikas Puri, New Delhi, India
110018
E-mail: info.in@prosetechnologies.com

Dhaka - Bangladesh
PROSE Technologies (Bangladesh) Limited
Add.: House-360 (2nd Floor), Lane-5 (East), Baridhara
DOHS, Dhaka-1206, Bangladesh
Tel: +880 1977070130
E-mail: info.bd@prosetechnologies.com

Islamabad - Pakistan
Add.: Unit 514, 5th Floor, ISE Towers, Islamabad,
Pakistan
Tel: +92 3335357733
E-mail: info.pk@prosetechnologies.com

Sri Lanka
Tel: +880 1977070130
E-mail: info.lk@prosetechnologies.com

South East Asia

Selangor - Malaysia
PROSE Technology (M) Sdn. Bhd
Add.: Unit 2-1, Level 2, The Podium, Tower 3, UOA
Business Park, No 1, Jalan Pengaturcara U1/51a,
Seksyen U1, 40150 Shah Alam, Selangor, Malaysia
Tel: +60 126859319
E-mail: info.my@prosetechnologies.com

Bangkok - Thailand
PROSE Technology (Thailand) Co., Ltd
Add.: 349 SJ Infinite I Business Complex, 9 Floor, Room
905, Vibhavadi Rangsit Road, Chom Phon Sun-district,
Chatuchak District, Bangkok Province, Thailand
Tel: +66 80 6606630
E-mail: info.th@prosetechnologies.com

Singapore
PROSE Technologies (Singapore) Pte.Ltd
Add.: 10 Anson Road#13-15 International Plaza
Singapore 079903
Tel: +6598366793
E-mail: info.sg@prosetechnologies.com

Hanoi - Vietnam
PROSE Technologies (Vietnam) Company Limited
Add.: Floor 15, Vinaconex 9 Building, HH-2 Block,
Pham Hung Street, Me Tri Ward, Nam Tu Liem District,
Hanoi, Vietnam
Tel: +84 933086498
E-mail: info.vn@prosetechnologies.com

Taguig - Philippines
PROSE Technologies Philippines, Inc.
Add.: Unit 17 19th Floor Highstreet South Corporate
Plaza Tower 1, 26th Street corner 9th Avenue, Bonifacio
Global City, Taguig City, Philippines
Tel: +63 27572762
E-mail: info.ph@prosetechnologies.com

Jakarta - Indonesia
PT. PROSE Technologies Indonesia
Add.: Plaza Sentral 6th Floor, Jalan Jenderal Sudirman
No. 47, Jakarta 12930, Indonesia
Tel: +62 21 57901997
E-mail: info.id@prosetechnologies.com

East Asia

Suzhou - China
PROSE Technologies (Suzhou) Co.,Ltd
Add.: No. 6, Shen'an Road, DianShanHu, Suzhou,
JiangSu, China
E-mail: Info@prosetechnologies.com

Beijing - China
PROSE Technologies (Beijing) Co.,Ltd
E-mail: Info@prosetechnologies.com

Shanghai - China
PROSE Technologies (Shanghai) Co.,Ltd
E-mail: Info@prosetechnologies.com

Dongguan - China
Add.: Room 1506, building 1, No. 1, Yile Road,
Songshanhu Park, Dongguan City, Guangdong
Province, China
E-mail: Info@prosetechnologies.com

Hongkong - China
PROSE Technologies Company Limited
Add.: Unit B 13/F,Prat Commercial Building, 17-19 Prat
Avenue, Tsimshatsui, Kowloon, HongKong, China
Tel:+86 512 86896789 - 2921/2922
E-mail: info.hk@prosetechnologies.com

Taiwan
Tel: +63 2 7572762
E-mail: info.tw@prosetechnologies.com

Oceania

New South Wales - Australia
PROSE Technologies (Australia) Pty. Ltd
Add.: 5/13 Boundary Rd, Northmead, NSW 2152,
Australia
Tel: +61 2 78055523
E-mail: info.au@prosetechnologies.com